DOCUMENT RESUME

ED 074 149 TM 002 514

AUTHOR	Moody, Lamar; Amos, Neil G.
TITLE	Assessment of Selected Innovative Educational Practices by Professional Educators. An Abstract of a Cooperative Research Project between the Mississippi School Study Council and the Bureau of Educational Research at Mississippi State University.
INSTITUTION	Mississippi School Study Council, Hattiesburg.; Mississippi State Univ., State College. Bureau of Educational Research.
PUB DATE	Oct 72
NOTE	17p.; Paper presented at annual meeting of the American Educational Research Association (New Orleans, Louisiana, February 25-March 1, 1973)
EDRS PRICE	MF-$0.65 HC-$3.29
DESCRIPTORS	*Administrator Attitudes; Educational Innovation; Flexible Scheduling; Individualized Instruction; Nongraded System; Open Plan Schools; Speeches; *Surveys: Tables (Data); *Teacher Attitudes; Team Teaching; Technical Reports

ABSTRACT

Elementary, middle, and high school teachers and principals indicated their amount of agreement or disagreement as to the educational effectiveness of the innovative practices of nongradedness, team teaching, flexible scheduling, individualized instruction, and open space classrooms. Significantly higher mean scores were obtained by elementary and middle school teachers experienced with the innovations than those inexperienced on all practices except individualized instruction. Significantly higher scores were obtained by experienced high school teachers than by inexperienced teachers on team teaching, flexible scheduling, and behavioral objectives. Experienced teachers and experienced principals did not differ significantly on any innovation. Significant differences were determined by t-tests. (Author)

FILMED FROM BEST AVAILABLE COPY

ED 074149

ASSESSMENT OF SELECTED INNOVATIVE EDUCATIONAL PRACTICES BY PROFESSIONAL EDUCATORS

By

Lamar Moody, Head of the Department of Educational Administration and Community College Education, Mississippi State University

And

Neil G. Amos, Head of the Department of Elementary and Secondary Education, Mississippi State University

TM 002 514

An Abstract of
A Cooperative Research Project Between the Mississippi School Study Council and the Bureau of Educational Research at Mississippi State University

Published By
Mississippi School Study Council
Hattiesburg, Mississippi
October, 1972

ASSESSMENT OF SELECTED INNOVATIVE EDUCATIONAL PRACTICES BY PROFESSIONAL EDUCATORS

Objectives

The decade of the sixties saw widespread implementation of educational practices which had been written about, talked about, and tried out on limited bases periodically for many years. Prominent among these practices were non-gradedness, team teaching, flexible scheduling, individualized instruction, behaviorally oriented objectives, and open space classrooms.

Member systems of the Mississippi School Study Council have spent millions of dollars during the last ten years in providing workshops, in making consultant services available to teachers, in sending personnel to visit other systems, in changing the organizational structure, and in renovating facilities in order to implement the six current practices included in this research project.

The Council needed to know the opinions of those closest to the educational scene - teachers and principals - as to the effectiveness of the practices in the teaching-learning environment. This project was predicated on the assumption that the professional opinions of educators is a valid technique to use in assessing the effectiveness of educational practices.

Obtaining answers to the following questions was the major focus of this research project:

(1) Are these six current practices of non-gradedness, team teaching, flexible scheduling, individualized instruction, behaviorally oriented objectives, and open space classrooms effective in the teaching-learning situation as perceived by teachers and principals?

(2) Are teachers and principals in agreement as to the effectiveness of the practices?

(3) Do the opinions of educators who have worked in schools where the practices were operative differ from those of educators who have only read about the practices or heard them described and/or discussed?

Methods

A Likert-type scale was designed by the researchers to measure the amount of agreement or disagreement of educators as to the effectiveness of each innovative practice. Participants were asked to state their age, sex, grade level classification, and whether they had worked in a school which used each innovative practice.

The following null hypotheses were tested:

No statistically significant difference exists between the mean scores of

(1) elementary teachers with experience and elementary teachers with no experience on each innovation

(2) middle school teachers with experience and middle school teachers with no experience on each innovation

(3) high school teachers with experience and high school teachers with no experience on each innovation

(4) elementary teachers with experience and elementary principals with experience on each innovation

(5) middle school teachers with experience and middle school principals with experience on each innovation

(6) high school teachers with experience and high school principals with experience on each innovation

(7) elementary teachers without experience and elementary principals without experience on each innovation

(8) middle school teachers without experience and middle school principals without experience on each innovation

(9) high school teachers without experience and high school principals without experience on each innovation.

The t-test was used to test for significance at the .05 confidence level.

Descriptive analyses were made for each innovation showing the percent of the respondents giving each rating on the scale; the analyses were made by grade organization level, by age level, and by subject area taught for both those with experience and those with no experience with the innovation.

Zero order correlation coefficients were computed between the age of the respondents and the mean rating given to each innovative

practice. The .05 confidence level was used to determine significant relationships.

All data were returned to the Bureau of Educational Research at Mississippi State University for analysis.

Data Source

The 306 individual schools comprising the Mississippi School Study Council were asked to participate; all the principals were included, and one third of the teachers were randomly selected and asked to participate. Eleven hundred seventy-five usable returns, representing elementary school, middle school, and high school levels, were received and analyzed.

Results

A summary of the perceptions of teachers and principals on the effectiveness of the six innovative practices is presented in Table 1. The data are presented in mean scores. A score of 1 would indicate strong disagreement, a score of 7 would indicate strong agreement, and a score of 4 would indicate a neutral position.

The following discussion will center around the obtained mean differences for each innovative practice.

Non-Graded Organization

The highest mean scores of those who had experience with non-graded organization were obtained by high school principals and middle school principals; the lowest mean score was obtained by high school teachers. Among those who had not had experience with non-graded organization, high school principals had the highest mean score and high school

Table 1

SUMMARY OF PERCEPTIONS OF TEACHERS AND PRINCIPALS
ON THE EFFECTIVENESS OF INNOVATIONS

(Data Reported in Means)

Classification	Non-Graded Organization		Open Space Classrooms		Team Teaching		Flexible Scheduling		Individualized Instruction		Behavioral Objectives	
	Exp.	No Exp.	Exp.	No Exp.	Exp.	No Exp.	Exp.	No Exp.	Exp.	No Exp.	Exp.	No Exp.
Elementary Teachers	6.2	5.1	4.5	3.7	6.0	5.4	6.7	6.1	6.2	6.0	6.1	5.2
Middle School Teachers	5.2	4.6	4.4	3.2	5.9	5.4	6.5	5.8	6.3	6.1	5.8	5.3
High School Teachers	4.5	4.4	3.7	3.3	6.0	5.4	6.6	5.8	6.4	6.2	6.0	5.1
Elementary Principals	6.5	4.7	4.8	4.1	6.3	5.3	6.6	6.1	6.5	6.1	6.2	5.3
Middle School Principals	6.3	4.6	5.3	4.5	6.2	5.4	6.9	6.2	6.5	5.8	6.1	4.4
High School Principals	6.5	5.8	6.0	4.9	6.2	6.3	7.0	5.8	6.8	6.0	6.2	5.4
Composite	5.9	4.9	4.8	3.9	6.1	5.5	6.7	6.0	6.4	6.0	6.1	5.1

teachers again had the lowest score.

Open Space Classrooms

The highest mean score of those who had experience with open space classrooms was obtained by high school principals and the lowest score was obtained by high school teachers, who expressed slight disagreement with the innovation as an effective practice. Among those who had not had experience in open space classrooms, high school principals again gave the practice the highest effectiveness rating and middle school teachers gave the practice the lowest rating.

Team Teaching

The highest mean score of those who had experience with team teaching was obtained by elementary principals, and the lowest score was obtained by middle school teachers. Among those who had not had experience with this practice, the highest score was obtained by high school principals and the lowest score was obtained by elementary principals. All the scores obtained for this practice were on the agreement end of the scale, indicating a positive perception toward team teaching as an effective practice.

Flexible Scheduling

The highest mean score of those who had experience with flexible scheduling was obtained by high school principals, who were unanimous in expressing strong agreement that flexible scheduling is an effective educational practice; the lowest score was obtained by middle school teachers, who also agreed that the practice is

effective. Among those who had not had experience with the practice, the highest mean effectiveness rating was obtained by middle school principals. The lowest scores were obtained by middle school teachers, high school teachers, and high school principals, with all three of these groups having the same mean score.

Individualized Instruction

All the scores obtained for this practice expressed agreement that individualized instruction is more effective than group instruction. The highest score of those who had experience with individualized instruction was obtained by high school principals, and the lowest score was obtained by elementary teachers. Among those who had not had experience with the practice, the highest mean score was obtained by high school teachers, and the lowest score was obtained by middle school principals.

Behavioral Objectives

The highest mean scores of those who had experience with behavioral objectives in curriculum planning and instruction were obtained by elementary school principals and high school principals; the lowest score was obtained by middle school teachers. Among those who had not had experience with the practice, the highest score was obtained by high school principals, and the lowest score was obtained by middle school principals.

Summary

The foregoing presentation was intended to point out the contrasts among the perceptions of the various groups of educators.

A study of the composite mean scores of all the educators points out that, as a group, they agree that the innovative practices of non-graded organization, team teaching, flexible scheduling, individualized instruction, and the use of behavioral objectives are effective educational practices. They do not perceive the open space classroom as more desirable than the standard classroom; the mean scores obtained represent the neutral position on the effectiveness of this innovation.

Presentation of Statistical Comparisons

Table 2 presents the comparisons of the mean scores among the various groups of educators utilizing the mean scores reported in Table 1. The discussion which follows will be organized around each set of comparisons made.

Elementary Teachers With Experience vs Elementary Teachers With No Experience

The analysis revealed significant differences at the .01 confidence level between the mean ratings of elementary teachers with experience and elementary teachers with no experience on the educational practices of non-graded organization, open space classrooms, team teaching, flexible scheduling and behavioral objectives. Each significant comparison revealed a higher mean score for those who had experience with the practice. No significant difference was obtained between the two groups on the practice of individualized instruction.

Table 2

COMPARISONS FOUND TO BE SIGNIFICANT

Comparisons	Non-Graded Organization	Open Space Classrooms	Team Teaching	Flexible Scheduling	Individualized Instruction	Behavioral Objectives
El. Teach. w/exp. vs. El. Teach. no/exp.	.01	.01	.01	.01		.01
El. Teach. w/exp. vs. El. Prin. w/exp.						
El. Teach. no/exp. vs. El. Prin. no/exp.						
Mid. Sch. Teach. w/exp. vs. Mid. Sch. Teach. no/exp.		.01	.05	.01		.05
Mid. Sch. Teach. w/exp. vs. Mid. Sch. Prin. w/exp.						
Mid. Sch. Teach. no/exp. vs. Mid. Sch. Prin. no/exp.		.05				
Sr. Hi Teach. w/exp. vs. Sr. Hi Teach. no/exp.			.01	.01		.01
Sr. Hi Teach. w/exp. vs. Sr. Hi Prin. w/exp.						
Sr. Hi Teach. no/exp. vs. Sr. Hi Prin. no/exp.	.01	.01				

Significance level indicated in appropriate blocks. All other comparisons found not significant.

Elementary Teachers With Experience vs Elementary Principals With Experience

No significant differences were obtained between the mean scores of elementary teachers with experience and elementary principals with experience on any of the six educational practices.

Middle School Teachers With Experience vs Middle School Teachers With No Experience

Significant differences at the .01 confidence level were obtained between the mean scores of middle school teachers with experience and middle school teachers with no experience on the educational practices of open space classrooms and flexible scheduling; significant differences at the .05 confidence level were obtained on the practices of team teaching and behavioral objectives. Each significant comparison revealed a higher mean score for those who had experience with the practice. No significant differences were found between the two groups on the practices of non-graded organization and individualized instruction.

Middle School Teachers With Experience vs Middle School Principals With Experience

No significant differences were obtained between the mean scores of middle school teachers with experience and middle school principals with experience on any of the six educational practices.

Middle School Teachers With No Experience vs Middle School Principals With No Experience

A significant difference at the .05 confidence level was obtained between the mean scores of middle school teachers with no experience and middle school principals with no experience on the practice of open space classrooms, with the principals giving the

higher mean effectiveness rating. No significant differences were obtained between the two groups on non-graded organization, team teaching, flexible scheduling, individualized instruction, and behavioral objectives.

High School Teachers With Experience vs High School Teachers With No Experience

Significant differences at the .01 confidence level were obtained between the mean scores of high school teachers with experience and high school teachers with no experience on the educational practices of team teaching, flexible scheduling, and behavioral objectives. Each significant comparison revealed a higher mean score for those who had experience with the practice. No significant differences were obtained between the two groups on the practices of non-graded organization, open space classrooms, and individualized instruction.

High School Teachers With Experience vs High School Principals With Experience

No significant differences were obtained between the mean scores of high school teachers with experience and high school principals with experience on any of the six educational practices.

High School Teachers With No Experience vs High School Principals With No Experience

Significant differences at the .01 confidence level were obtained between the mean scores of high school teachers with no experience and high school principals with no experience on the educational practices of non-graded organization and open space

classrooms, with the principals giving the higher mean ratings on both innovative practices. No significant differences were obtained between the two groups on the practices of team teaching, flexible scheduling, individualized instruction, and behavioral objectives.

Relationship Between Age and Mean Scores Obtained By Teachers

Table 3 presents the zero order correlation coefficients obtained between age and rating given to each innovative practice by teachers.

Only one statistically significant correlation coefficient was found among the groups of respondents who had experience with the practices. A significant (.05 level) positive relationship was found between the age of high school teachers and the rating given to the use of behavioral objectives in curriculum planning and instruction. There was a tendency for the rating of the practice to be higher as the age of high school teachers who had used the practice went up.

Three statistically significant correlation coefficients were found among the groups of respondents who had not had experience with the practices. A significant (.01 level) negative relationship was found between the age of elementary teachers and the rating given to the practice of open space classrooms; as age increased, the rating given the practice decreased. A significant (.01 level) negative relationship was found between the age of middle school teachers and the rating given to the practice of open space classrooms; as age increased, the rating decreased. A

Table 3

CORRELATION COEFFICIENTS OBTAINED BETWEEN AGE AND RATING GIVEN TO EACH INNOVATIVE PRACTICE BY TEACHERS

Group	Non-Graded Org.		Open Space Clsrm.		Team Teaching		Flex. Sched.		Ind. Instrn.		Beh. Obj.	
	Exp.	No Exp.	Exp.	No Exp.	Exp.	No Exp.	Exp.	No Exp.	Exp.	No Exp.	Exp.	No Exp.
Elementary Teachers	.00 (142)[a]	-.03 (411)	-.10 (112)	-.20** (428)	-.04 (266)	-.09 (257)	.04 (325)	-.05 (218)	-.08 (352)	-.09 (196)	.09 (307)	.01 (241)
Middle School Teachers	-.47 (15)	-.10 (221)	-.34 (30)	-.25** (206)	-.21 (59)	-.32** (117)	-.07 (77)	-.02 (157)	-.07 (92)	-.10 (137)	.07 (90)	.00 (147)
High School Teachers	-.03 (19)	.11 (268)	.35 (28)	-.08 (259)	-.10 (57)	.00 (228)	-.15 (75)	-.07 (199)	-.17 (120)	.04 (91)	.20* (113)	-.13 (172)

[a]Numbers in parentheses indicate the number of respondents.
*Significant at .05 level.
**Significant at .01 level.

significant (.01 level) negative relationship was found between the age of middle school teachers and the rating given the practice of team teaching; as age increased, the rating decreased.

Educational Significance

All groups of respondents indicated a positive opinion toward individualized instruction as an effective educational practice. It is interesting to note that significant differences were found, in most of the group comparisons, between those with experience and those with no experience with the innovation on the five practices of non-gradedness, team teaching, flexible scheduling, open space classrooms, and behaviorally oriented objectives -- all of which contribute toward individualization of instruction. It is of further interest to note that, without exception, all comparisons between those with experience and those without experience with the practices showed higher mean scores obtained by those with experience. Even though many instances of high ratings were noted for those with no direct experience with the practices, invariably the group of respondents with direct experience with the practices rated them even higher. Administrators can expect, then, that both principals and teachers will give higher effectiveness ratings to educational practices when they have had direct involvement with the practices than when they have only heard or read about the practices.

An interesting finding emerged from the data when the factor of age was related to acceptance of open space classrooms. Elementary teachers tended to reject this innovation as their ages increased

even though they had never tried this organizational plan. This finding also held true for middle school teachers with no experience in the open space classroom. The age barrier also affected middle school teachers' acceptance of the practice of team teaching. As the ages of middle school teachers with no experience with team teaching increased, generally there was less acceptance of the practice. However, teachers who have tried these innovations, regardless of age, rate them higher than teachers who have not tried them. The factor of age tends to be discounted as teachers gain experience with any of the six innovations studied.

The significant negative relationships found between age and the mean effectiveness rating given to open space classrooms by both elementary and middle school teachers without direct experience with the practice should provide useful information to the administrator who plans to introduce the practice. The reluctance on the part of older teachers to give a high rating to open space classrooms should not be construed to indicate a resistance to change. It should, however, indicate that more experienced teachers will need to be furnished with strong evidence that such a radical departure from that to which they have become accustomed will result in a more effective educational program. Middle school administrators can expect to find the same reluctance on the part of more experienced teachers when introducing team teaching. Again, the older teachers will expect sound information and will need patience and understanding as they move from the familiar to the untried.

A factor which may cloud the perceptions of middle school teachers and principals is the lack of a distinctive definition of the middle

school. In regards to the open space classrooms, both elementary school and middle school teachers and principals may tend to hold negative opinions because of the lack of opportunities to see this innovation in practice combined with the factor that no distinctive definition has been established. In other words, as the open space classroom and the middle school become more widely established, and teachers and administrators become more familiar with these concepts, perhaps more positive acceptance for these innovations will develop.

High school teachers with experience strongly accept the use of behavioral objectives. This acceptance of behavioral objectives increases as the factor of age increases. This finding implies that high school teachers who gain experience and age accept the use of behavioral objectives in teaching more readily than young and inexperienced high school teachers.

In summary, it appears that working together in planning and implementing educational innovations will tend to result in principals and teachers having a common positive percention about the effectiveness of the innovations. Principals and teachers who had experience with the six practices did not differ significantly in the effectiveness ratings they assigned the practices.